

# VU Research Portal

## The Migration-Development Nexus: New Perspectives and Challenges

Baycan, T.; Nijkamp, P.

2013

### **document version**

Early version, also known as pre-print

[Link to publication in VU Research Portal](#)

### **citation for published version (APA)**

Baycan, T., & Nijkamp, P. (2013). *The Migration-Development Nexus: New Perspectives and Challenges*. (Research Memorandum; No. 2013-1). Faculty of Economics and Business Administration.

### **General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

### **Take down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

### **E-mail address:**

[vuresearchportal.ub@vu.nl](mailto:vuresearchportal.ub@vu.nl)

# **The Migration-Development Nexus: New Perspectives and Challenges**

**Research Memorandum 2013-1**

**Tüzin Baycan  
Peter Nijkamp**

# **The Migration-Development Nexus: New Perspectives and Challenges**

Tüzin Baycan and Peter Nijkamp

Pn443tb

## **1. Reconsidering Migration in the ‘Age of Mobility’**

Although the share of international migrants in the world’s population has remained remarkably stable at around 3 per cent over the past 50 years (UNDP, 2009), international migration has increasingly become more complex and diverse with the increasing mobility, as well as with the new types of migrants such as ‘transit migrants’ (Vertovec, 1999) and ‘environmental refugees’ (Myers, 2005). The growing complexity and diversity in migration have been driven both by the globalization of labour, commodity and capital and by the revolutions in transport and communication technologies (Castles and Miller, 2009; Dayton-Johnson et al., 2007; Haas, 2009; IMI, 2006; IOM, 2010; Vertovec, 2004 and 2007), and in recent years by a counter environmental response to development: namely, ‘climate change’ (Black, 2001; Black et al., 2008; Brown, 2008; Myers, 2005; Stern, 2007; UNDP, 2009).

Contemporary international migration is a central dimension of global transformation processes that are characterized by a new mobility system, which involves diverse forms of migration patterns such as retirement migration, mobility in search of better or just different lifestyles, and repeated or circular migration (Castles and Miller, 2009; Dayton-Johnson et al., 2007; Vertovec, 2007). Today, more people are moving more frequently, prompted not only by gaps in living standards and advances in transportation and communication but also by the global competition for talent and the new demographics which juxtaposes the developed world’s ageing population with the developing world’s growing young population (Dayton-Johnson et al., 2007; Sriskandarajah, 2005). This increasing mobility is called the ‘age of mobility’ and the new system of international migration is increasingly being recognized as an emerging system of international labour mobility rather than an immigration system per se (Dayton-Johnson et al., 2007). The new mobility system shaped by the global transformation processes requires the meaning of migration to be considered.

This new mobility system is leading to the development of the migratory networks, by linking areas of origin and destination, and by helping to bring about major changes in both. However, *‘migration is not an independent variable “causing” development (or the reverse), but it is an endogenous variable, an integral part of change itself and a factor that may enable further change* (Haas, 2010: 253). Therefore, there is a reciprocal relationship between migration and development processes rather than a one-way impact of migration on development. This

reciprocal relationship makes migration one of the most important factors in global transformation processes. The links between this emerging mobility system and the economic and social outcomes for both migrant-sending and migrant-receiving countries have in recent years drawn attention to the developmental impacts of migration and the 'migration-development nexus' has become a new paradigm in migration studies (Castles and Miller, 2009; Dayton-Johnson et al., 2007; Haas, 2010; IMI, 2006; Katseli et al., 2006; Papademetriou and Meissner, 2006; Sriskandarajah, 2005). This new paradigm considers migration as an integral part of development and global transformation process.

Reconsidering international migration as a new mobility system, as well as an integral part of a development and the global transformation process necessitates a new understanding of global migration dynamics. The current state of global migration dynamics requires us to better understand: (i) the global context of development and the emergence of global cultural and social connectivity; (ii) the changing characteristics of nation states, and the complex ways in which they are embedded in regional and global relationships; (iii) transformations in communities of both sending and receiving areas; (iv) the transnational character of migrants' identities that challenges classical notions of migrant integration and the nation state; (v) the factors that encourage but also hamper effective policy making and collaboration across boundaries; and (vi) the perceived impacts of migration that create new pressures on nation states – all of which has led to a growing complexity (Dayton-Johnson et al., 2007; IMI, 2006; Katseli et al., 2006; Papademetriou and Meissner, 2006; Vertovec, 2004).

This new mobility system requires a rethinking of previous views of migration, a new focus on the reciprocal impact of migration and development which has been a neglected issue in migration and development literature, and new approaches and policies for mobility management. As migration is an increasingly dynamic phenomenon, such a new migration thinking requires a better understanding of the dynamics of the phenomenon and the development of new concepts, theories and policy instruments in order to replace the outmoded ideas and the old static thinking of a different era. This new focus on the reciprocal impact of migration and development requires us to develop ways to understand the multiplicity of the impacts of migration upon development (and vice versa), and to assess the extent to which the migration policies of countries are 'development-friendly'. This new focus also requires governments to go beyond just knowing the characteristics of migration; that is, to understand what migration means for development, and to develop migration-sensitive development policies. Better mobility management requires new approaches and policies that are further needed to act as impact assessment tools in policy planning.

This chapter investigates the emerging global dynamics of international migration, or, in other words, the 'new mobility system', which is characterized by diverse forms of migration patterns and highlights the need for a 'new migration thinking' that focuses on the reciprocal impact of migration and development. The chapter evaluates what's old and what's new in migration thinking and highlights the prerequisites and challenges for the new mobility system. How and to what extent do migration and development affect each other? In the course of looking at migration policies through a development lens, or, in other words, the reciprocal impacts between migration and development, the chapter focuses on migration and development impact assessment and on integrating international migration into development strategies. The chapter

underlines the importance of interlinking migration and development policies in order to achieve a more effective management of migration. While addressing the new perspectives and challenges, the chapter also aims to answer how we can link research/analysis and policy making in a more constructive and sustainable way.

## **2. Global Migration Dynamics and New Migration Patterns**

The share of international migrants in the world's population has remained remarkably stable at around 3 per cent over the past 50 years (UNDP, 2009). The total number of migrants increased from 74.1 million to 188 million between 1960 and 2010, but the global share of migrants increased only from 2.7 per cent to 2.8 per cent. Nevertheless, there has been a significant growth in the number and the share of international migrants in developed countries: while the number of migrants increased from 31.1 million to 119.9 million, the share of migrants more than doubled, from 4.6 per cent to 12.1 per cent. The highest increase, from 4.6 per cent to 38.6 per cent, occurred in the Gulf Cooperation Council (GCC) countries, which have experienced rapid oil-driven growth. The growth of migration has also been remarkable in Europe, the share of migrants almost tripled, from 3.5 per cent in 1960 to 9.7 per cent in 2010 (UNDP, 2009). However, international migratory flows have remained relatively small compared with other flows such as trade or financial flows. While, between 1960 and 2000, the share of merchandise exports and trade in services in world GDP roughly doubled (from around 10 to 20 per cent and 3 to 5 per cent, respectively) (Srisakandaram, 2005), the share of international migrants in world population has not risen dramatically (3 per cent). Economic disparities between countries have influenced the dynamics of international migration, and, while the fastest growth in the number of migrant has taken place in developed countries, many people have moved from poorer to richer countries: about a quarter (24.9 per cent) of all international migrants have moved from non-OECD countries to OECD countries (34.1 million) (Harrison et al., 2004).

In the same period (1960-2010), the number of nation states has increased four times and reached to almost 200, creating more borders to cross, however, against the increasing barriers and strict regulations have been implemented by governments, today an estimated 50 million migrants living and working abroad with irregular status (UNDP, 2009).

According to Human Development Report 2009 (UNDP, 2009), there are approximately 740 million internal and 200 million international migrants. While one third – fewer than 70 million – of international migrants have moved from a developing to a developed country, most of the international migrants have moved from one developing country to another or between developed countries, and most movement has occurred within regions (Figure 1).

Although the global volume of international migration has not changed dramatically, there has been a remarkable change in the dynamics and patterns of migration. Growing demographic disparities, the effects of environmental change, new global political and economic dynamics, technological revolutions, and social networks have changed the dynamics and patterns of migration (Castles and Miller, 2009; IOM, 2010; UNDP, 2009). International migration has become a central dimension of global transformation processes that are characterized by the new mobility system, which involves diverse forms of migration patterns, such as retirement migration, mobility in search of better or just different lifestyles, and repeated or circular

migration (Castles and Miller, 2009; Dayton-Johnson et al., 2007; Vertovec, 2007). Mobility has increased enormously, and international migration has been undertaken by a wider diversity of ethnic and cultural groups than ever before. International migration has increasingly become more complex and diverse with the increasing mobility, as well as with the new types of migrants such as ‘transit migrants’ (Vertovec, 1999) and ‘environmental refugees’ (Myers, 2005). The growing complexity and diversity in migration have been driven, in recent decades, by both globalization and the revolutions in transport and communication technologies (Castles and Miller, 2009; Dayton-Johnson et al., 2007; Haas, 2009; IMI, 2006; IOM, 2010; Vertovec, 2004, 2007).

Figure 1 Origin and destination of international migrants (Source: UNDP, 2009)

receiving, transit and sending countries (*growing politicization*). Finally, many traditional emigration countries, such as Poland, Morocco, Mexico, Turkey, South Korea are experiencing various stages of a migration transition (*proliferation of transition*) and they themselves are becoming transit and immigration countries.

These emerging dynamics and new patterns are also expected to transform the future migration trends. Growing demographic disparities, the effects of environmental change or climate change, new global political and economic dynamics, technological revolutions, and social networks are likely to transform the complexity in the future. While some of the future trends can be predicted on the basis of past and current trends, e.g. in demographic disparities, others will remain difficult to predict as a result of the uncertainties involved, e.g. in climate change.

According to demographic forecasts by UNDP (2009), the world's population will grow by a third over the next four decades and the population of developed countries is likely to peak in 2020 and fall by 7 per cent in the following three decades. By 2050, the global working-age population is expected to increase by 1.1 billion, whereas the working age population in developed countries, even assuming a continuation of current migration flows, will decline slightly. It is estimated that, by 2050, the average age in developing countries will be 38 years, compared with 45 years in developed countries. With this 7 years of age difference, it is estimated that, over the next 15 years, new entrants to the labour force in developing countries will exceed the total number of working-age people currently living in developed countries. This process affects the dependency ratio: it is estimated that the proportion of elderly will rise markedly in developed countries by 2050, and that there will be 71 non-working-age people for every 100 of working age. If developed countries were to become completely closed to new immigration, this ratio would rise to 78 by 2050 (UNDP, 2009). Therefore, the growing demographic disparities are expected to increase the complexity of international migration for both migrant receiving and sending countries from the perspective of development. It is also expected that growing demographic disparities will increase the complexity from the policy perspective, given the strict regulations and barriers that have been implemented by receiving countries to control the entry of migrants. There are many challenges, from both development and policy perspectives, to better manage the growing complexity of international migration.

How will climate change affect migration trends? How could projected climate change interact with current migration flows? How will climate change will shape future migration patterns? In recent years, climate change has become a growing concern in migration studies, as it may encourage large numbers of people to migrate over long distances (Black, 2001; Black et al., 2008; Brown, 2008; Development Research Centre on Migration, Globalisation & Poverty, 2008; Myers, 2005; Stern, 2007). Myers (2005) estimates that there were 25 million environmental refugees, compared with 27 million traditional refugees in 1995, and the total of environmental refugees could double between 1995 and 2010. He also emphasizes that the 1995 estimate of 25 million environmental refugees was conservative: throughout the developing world there were 135 million people threatened by severe desertification, and 550 million people subject to chronic water shortage. While some studies estimate and assume that 150-200 million people will permanently leave areas affected by climate change impacts (Myers, 2005; Stern, 2007) to one billion (Christian Aid, 2007; Lovell, 2007), other studies argue that existing research does not provide evidence that there is a direct relationship between climate change and

long-distance migration, and, even if climate change does provoke some migration, it will likely be interrelated with existing migration channels due to the social networks and capital constraints that determine people's ability to migrate (Development Research Centre on Migration, Globalisation & Poverty, 2008). According to this view, many people may remain tied to their homes if they lack social connections outside their communities and, especially for poor people, long-distance migration is likely to be difficult (UNDP, 2009). For example, following the Indian Ocean Tsunami in 2004, an estimated 400,000 persons were displaced, but very few migrated over long distances and most were absorbed by neighbouring regions. Similarly, prior to Hurricane Katrina in the city of New Orleans and surrounding areas in 2005, up to 70,000 inhabitants who were living in poverty were unable to leave the city before the storm hit. These cases show that although there were significant environmental 'push' factors encouraging residents to leave affected areas, people's mobility was mediated by other factors including socio-economic conditions (Development Research Centre on Migration, Globalisation & Poverty, 2008). Climate change impacts are projected to become increasingly strong during the next decades, but the effects of climate change on migration are not fully understood, partly due to uncertainty surrounding the onset of climate change impacts. The effects of climate change depend on how change comes about – as discrete events or as a continuous process. Discrete events often come suddenly and dramatically and force people to move quickly to more secure places, whereas continuous processes are associated with slow-onset changes like sea level rise, erosion of agricultural lands and growing water scarcity (UNDP, 2009). Given the uncertainty, as weather and climate change will occur by means of either a continuous process or discrete events, the extent and type of the resulting adaptation and movement are difficult to predict. However, whatever happens, the effects of climate change are expected to increase the complexity of international migration in the future.

Obviously, the global dynamics and new patterns of migration flows are very complex and expected to become even more complex in the future as a result of both global transformation processes and uncertainties and limited understanding of the phenomenon. What is more clear is that international migration is an integral part of development and global transformation processes. Therefore, to better understand the migration-development nexus is of critical importance.

### **3. The Migration-Development Nexus: Global Transformation Processes**

Migration has the potential to have the most significant and lasting impacts. Migration can transform the individuals who move, the societies they move into, and even the societies they leave behind. These mutual impacts have always played an important role in the context of economic development (Dayton-Johnson et al., 2007; Haas, 2010; IMI, 2006; Katseli et al., 2006; Sriskandarajah, 2005).

Migration can have significant economic benefits for both migrant-receiving and -sending countries, as well as the migrants themselves. While economic migrants benefit from significant income gains when they migrate, the receiving countries benefit from labour supply provided by migration in order to keep their economy dynamic, and the sending countries benefit from remittances and the contributions to the well-being of their countries through trade, investment, networking, and skill transfer (Haas, 2010; Katseli et al., 2006; Ratha, 2003; Sriskandarajah,



2005; World Bank, 2011). However, migration can also have adverse economic impacts on the sending countries, especially for the poorest countries, while it leads to a drain of high-skilled people and aggravates the inequality between developed and developing countries (Katseli et al., 2006; Sriskandarajah, 2005). The effects of migration on sending countries critically depend on migration patterns, including the balance between temporary versus permanent migration and between high-skill versus low-skill migration, as well as on the capacity of sending countries including the particular sectors and labour markets affected by emigration and the scale of remittances, which together determine the ability of the sending countries, to adjust to, and profit from, migration (Katseli et al., 2006; Sriskandarajah, 2005).

The mutual development impacts of migration have become more important in recent years because of increasing mobility and especially the new forms of repeated or circular migration, development of information and communication technologies, development of the migratory networks that link sending and receiving countries, and increasing transnational activities. As the scale and complexity of migratory flows have grown, the mutual development impacts of the flows of people, skills, knowledge, and remittances have received considerable attention from researchers and policy makers. Therefore, the 'migration-development nexus' has become of great interest, as well as a new paradigm, in recent years (Castles and Miller, 2009; Dayton-Johnson et al., 2007; Haas, 2010; IMI, 2006; Katseli et al., 2006; Papademetriou and Meissner, 2006; Sriskandarajah, 2005). This new paradigm considers migration as an integral part of development and the global transformation process.

The migration-development nexus has become an important paradigm, especially from the policy perspective for reducing poverty and improving development. According to Adams and Page (2003: 20), *"on average, a 10 per cent increase in the share of international migrants in a country's population will lead to a 1.9 per cent decline in the share of people living on less than \$1.00 per person per day"*. In the sending countries, this progress will be mainly achieved by remittances. The transnational flows of money earned by migrants abroad, i.e. the remittances, are a major economic resource. Remittances from migrants to developing countries are large and rising. The value of worldwide remittances doubled during the 1990s to over \$105 billion annually – more than twice the level of international aid (Vertovec, 2007). According to World Bank estimates, worldwide recorded remittance flows reached \$440 billion in 2010 (World Bank, 2011). In Latin America and the Caribbean, the largest and fastest growing remittance-receiving region in the world, remittances now exceed the combined flows of all foreign direct investments (FDI) and net official development assistance (ODA) (IADB, 2004). As a percentage of national income, remittances account for as much as a third of GDP in some countries (i.e. Tonga) (Ratha, 2003). These figures have prompted policy makers to delve into migration matters as never before.

While migration in general and remittances in particular, play an important positive transformative role in economic development and poverty reduction, a specific form of migration, high-skill migration from developing to developed countries can have mixed or adverse economic effects on the sending countries. There is an increasing demand for high-skilled talents by developed countries and they are increasingly encouraging the immigration of high-skilled people (scientists, engineers) to fill the gaps caused by the ageing population. Therefore, an increasing 'brain drain' is one of the current trends in migration (Commander et

al., 2003; Kapur, 2004; Lowell et al., 2004; Sriskandarajah, 2005; UNESCO, 2009; Wyss, 2004). Several studies report that the share of high-skilled migrants in developed countries is remarkable. Nearly one in ten tertiary-educated adults born in the developing world reside in North America, Australia or Western Europe (Lowell et al., 2004). Between one-third and half of the developing world's science and technology personnel live in the developed world (Sriskandarajah, 2005). By the end of the 1990s, Indians working in the US on working visas accounted for 30 per cent of the Indian software labor force (Commander et al., 2003). Jamaica loses about 20 per cent of its specialist nurses annually to mainly the US or the UK (Wyss, 2004). The proportions of tertiary educated people amongst emigrants from some developing countries is vastly higher than their share in the resident population: for example, 79.8 per cent of emigrants from India have a tertiary education while only 2.5 per cent of the overall Indian population have a tertiary education (Kapur, 2004). However, it is important to recognize that 'brain drain' does not necessarily lead to 'brain strain'. Highly-skilled migrants who would not have otherwise been employed effectively in the domestic labour market owing to an oversupply of workers with those skills do not necessarily represent a loss to the economy when they migrate (Sriskandarajah, 2005). Early evidence from India's IT sector suggests that the impact of mobility has not had clearly adverse impacts (Commander et al., 2004). Recent migration flows have also shown that, for example, more and more Indians are now returning to their home countries equipped with skills and knowledge that they could not have obtained in their home countries. High-skill migration and brain drain are complex issues in the development-migration nexus, and can be expected to determine the future dynamics and patterns of international migration.

Another important dimension in the development-migration nexus is transnationalism and circular migration patterns that are based on transnational networks. According to Vertovec (2007), circular migration patterns can be in various forms called repeat, rotating, multiple, seasonal, cyclical, shuttling, or circuit-based modes of migration. There is an increasing probability of making repeat moves for individuals who have already moved as with each move migrants learn more about migration and such knowledge also called 'migration-specific capital' decreases the costs and the risks and increases the chances of success, and therefore encourages circular migration (Vertovec, 2007). Migrant transnationalism has become an important topic in migration studies in the last two decades (Glick-Schiller et al., 1992; Portes et al., 1999; Vertovec, 2004). Recently, policy makers have also come to recognize how transnational ties condition migration processes, and national and international policies have turned to temporary and circular migration. Several international and national agencies have underlined the importance of circular migration as a preferred, forward-looking mode of migration management in their recent documents (GCIM, 2005; EC, 2005a, 2005b; House of Commons, 2004; IOM, 2005; World Bank, 2006). In these documents, they have emphasized that: (i) the old paradigm of permanent migration is giving way to temporary and circular migration (GCIM, 2005); (ii) circular migration could bring benefits, especially to developing countries (IOM, 2005); (iii) it might increase broad opportunities for trade and investment linkages, reduce brain drain by facilitating the international transfer of skills, and reduce the negative social consequences associated with illegal migration, as well as being a palatable idea where public opinion is strongly resistant to permanent migration of the unskilled (World Bank, 2006); and these agencies have suggested that the receiving countries should promote circular migration by providing mechanisms and channels (i.e. the provision of long-term multi-entry visas) that

enable migrants move easily, and should focus on policies that encourage circular migration. The perceived potential benefits of circular migration include: for receiving countries: meeting labour market shortages; for sending countries, ensuring the flow of remittances for development; and, for migrants, offering employment and control over the use of their wages. Therefore, it is thought that circular migration could be managed in ways that provide three-way benefits and that bring ‘win-win-win’ results (Vertovec, 2007). However, Vertovec (2007) states that the ‘wins’ of the win-win-win scenario may not be as mutual as imagined. In addition, as mentioned by Sriskandarajah (2005), the fear of losing pension entitlements from exiting a country or not being able to earn pension rights from a temporary period of work can be a significant obstacle for circular migration.

Obviously, the relationship between migration and development is significant, but it is also marginal in many ways (Haas, 2010; Sriskandarajah, 2005). Although the development-migration nexus is seen as an important paradigm to reduce poverty and improve development, the gain from migration is highest for politically-stable middle-income countries with a growing economy and financial infrastructure, whereas the very poorest countries stand to lose the most and gain the least from migration owing to the problems, including brain strain, low return migration, and a poor environment for the productive use of remittances (Sriskandarajah, 2005). On the other hand, as migration is a selective process, most international remittances do not tend to flow to the poorest members of communities nor to the poorest countries (Haas, 2010). Therefore, the expected positive impacts of remittances for poverty reduction may not be as high as imagined. In addition, one of the most striking yet under-researched aspects of the relationship between migration and development is the potential for migration to affect inequality between individuals and at a global level (Sriskandarajah, 2005).

How can the development impacts of migration be measured? Actually, there is no specific methodology to measure the development impacts of migration. Sriskandarajah (2005) suggests a Migration-Development Index (MDI) similar to UNDP’s Human Development Index (HDI) to measure the development impacts of migration. Sriskandarajah states that (2005: 30), “A *Migration Development Index (MDI)* could be a composite index that sought to capture the scale and net economic impacts of migration. Analysis could include the net flows of migrants, human capital, remittances and other financial transactions for each country included and assess the impact of each on income, poverty, inequality and other development outcomes.” He mentions that, while such a measure could never capture the complexity of what is involved, it could be a useful tool for researchers and policy makers. Nevertheless, his suggestion remains very general as there is neither a clearly described index nor any application.

Not only the lack of measurement tools, but also the lack of comprehensive theories make it difficult to evaluate the development-migration nexus. As the migration and development debate focuses on migration processes, it has evolved rather separately from general migration theory, and general migration theories do not offer specific insights into the nature of migration impacts on development in sending societies. There has been a tendency to study the causes and impacts of migration separately, which largely constitute separate strands of the migration literature. The academic debate on migration has tended to separate the developmental causes (determinants) and effects (impacts) of migration artificially from more general processes of social and economic change. In the next section, we evaluate theories of international migration on the basis

of both their main concerns and criticisms, and we discuss the need for a new migration thinking in order to better understand the growing complexity of the phenomenon.

#### **4. Theories of International Migration in the ‘Age of Mobility’: The Main Concerns and Criticisms**

There is no single, coherent theory of international migration, but rather a fragmented set of theories, sometimes also segmented by the boundaries of disciplines, including demography, sociology, economics, geography and political science. Depending on the researcher’s focus of interest, the theories can be also classified in different ways, such as ‘*classical migration research*’ and ‘*theories explaining perpetuation of migration*’ (Thieme, 2006), ‘*macro-level theories*’ and ‘*micro-level models*’ (Morawska, 2007), or ‘*developmentalist optimism*’ and ‘*neo-Marxist pessimism*’ (Haas, 2010). While classical models include older theories that are based on the view that pull and push factors initiate migration, perpetuation models include more recent or contemporary theories that explain international migration by interpersonal ties and kin and friendship networks. While classical models consider migration processes as an uni- or bi-directional movement realized by emigration, immigration or return migration, perpetuation models focus on circular migration and transnational activities (Thieme, 2006). According to the other classification that is based on macro- and micro-level models, macro-level theories focus on the forces responsible for international population flows in terms of large structures and long processes, whereas micro-level models explain this movement by local circumstances and the features and needs of individuals (Morawska, 2007). A recent classification by Haas (2010) is based on a division of optimism and pessimism that reflects deeper paradigmatic divisions in social theory, including functionalist versus structuralist paradigms and development theory including balanced growth versus asymmetric development paradigms. Haas states that these opposing views also reflect ideological divisions between neo-liberal and state-centrist views. For a comprehensive overview and evaluation of migration theories, we refer to Massey (1990, 2003); Massey et al. (1993, 1998); Morawska (2007); Haas (2010); and Thieme (2006).

There are no less than ten theoretical models that explain the mechanisms triggering and sustaining international migration: (i) *the push and pull model*; (ii) *segmented labour market theory*; (iii) *world-system theory*; (iv) *the political economy model*; (v) *neoclassical economic theory (known also as rational choice)*; (vi) *human capital theory*; (vii) *the new economics of migration theory*; (viii) *migration network or social capital theory*; (ix) *cumulative causation theory*; and (x) *transnationalism*. We first summarize these theories, and then detail the criticisms of these theories in the literature, and, finally, we highlight the need for a new migration thinking.

*The Push and Pull Model:* This model is one of the classical migration models at the macro-level and based on the view that pull and push factors initiate migration. According to the push and pull model, international migration is generated by macro-level disequilibria between regions or countries in the supply of, and demand for, labour and the resulting wage differences that these imbalances create. The push and pull model assumes that international labour migration will equalize these economic imbalances.

*The Segmented Labour Market Theory:* Dual market theory or segmented market theory links immigration to the structural requirements of modern industrial economies (Piore, 1979). This model views international labour migration as demand-based that responds to the structural needs of highly developed economies. These structural needs include high-skill, well-paid jobs with good advancement opportunities for capital-intensive sectors and low-paid unskilled jobs for labour-intensive sectors.

*World-System Theory:* World-system theory is a recent addition to macro-level models and sees migration as a natural consequence of economic globalization and market penetration across national boundaries (Wallerstein, 1974; Sassen, 1988). This model views the transnational population flows as generated by the structure of the global economy and refers to the already introduced terms of 'core' and 'periphery'.

*The Political Economy Model:* The political economy model focuses on the political mechanisms which generate transnational population flows rather than on the economic concerns of the other macro-level theories. This model considers the receiving countries' immigration policies, such as the regulations of entry, permission to work, and citizenship, as shaping the volume and directions of international migration.

*Neoclassical Economic Theory:* Neoclassical economic theory is also known as 'rational choice theory' (Todaro, 1976; Borjas, 1989) and explains the individual-level mechanism of international migration within a macro-structural framework. The neoclassical economic model focuses at the macro-level on differentials in wages and employment conditions between countries, and at the micro-level presumes that individuals make rational calculations of the economic costs and benefits of migrating. Although international movement is rarely observed in the absence of a wage gap, wage differentials are neither a necessary nor a sufficient condition for international migration: people may migrate if other markets are inefficient or poorly developed even with equal wages across labour markets.

*Human Capital Theory:* Human capital theory explains international migration as being dependent on the components of individual (human) capital such as age, gender, education, skill, experience, and marital status, as well as personality features such as ambition to succeed and 'entrepreneurial spirit', or risk-taking behaviour such as changing language, culture, and social environment. Human capital theory considers international migration to be selective, and explains the context of (e)migration by the absence of income-earning and socio-economic advancement opportunities at home. As international migrants are selected with respect to their human capital, the theory also considers that these transnational relocations create a 'brain drain' from developing countries that cannot meet the income and career expectations of their highly educated people. Another path of brain-drain migration is that of the international students from developing countries who usually do not intend to return to their home countries after completing their studies.

*New Economics of Migration Theory:* New economics of migration theory (Stark, 1991) focuses on households or families as the decision-making units rather than individuals. In this model, the collectively-made decisions are responses to local income uncertainties and to irregularities in local markets. Therefore, this model views migration as a household strategy to minimize family

income risks and considers not only the labour market but also other markets such as the capital market and the unemployment insurance market, as reasons to migrate. This model also considers the household's existing and desired economic and status position in the local community.

*Migration Network or Social Capital Theory:* Network theory concerns the mechanisms that sustain transnational population flows. According to this approach, the existence of social networks of information and assistance, or in other words, social capital significantly increases the likelihood of continued international migration between origin and destination (Massey et al., 1994). Such networks lower the risks of travel and increase the expected returns by providing access to employment and wages abroad. One example of migration networks are ethnic economies or ethnic enclaves and niches (Granovetter, 1985; Portes, 1994). Studies of migrant entrepreneurship show that migrants' kinship networks are a key resource for the creation of small businesses (Baycan-Levent et al., 2003).

*Cumulative Causation Theory:* Cumulative causation theory (Massey, 1990; Massey et al., 1993) concerns the persistence of transnational population flows and the several factors that shape this movement. According to the theory of cumulative causation, over time, the process of network expansion itself becomes self-perpetuating, because each act of migration creates a social infrastructure capable of promoting additional movement. Therefore, the model states that causation is cumulative, and migration sustains itself by creating more migration.

*Transnationalism:* A recent approach in migration studies is transnationalism and transmigration. While transnationalism is based on the unit of countries, transmigration refers to the social unit of transnational communities (Glick-Schiller et al., 1992; Portes et al., 1999; Pries, 1999; Vertovec, 1999 and 2004). This approach draws attention to the increased possibilities for migrants to live transnationally and to adopt transnational identities. The transnationalism approach states that the development of information and communication technologies (i.e. mobile phone, internet) fosters links between migrants and their societies of origin, and increasingly enables migrants to foster double loyalties (i.e. to travel back and forth, to relate to people, and to do business in distant places). These strong transnational ties can even become trans-generational over sustained periods (Haas, 2010).

The complexity of interrelated multi-level factors that shape international migration has led to critical evaluations of the existing theories of migration. The main criticism of the existing theories concerns the exclusive focus on single causal factors and the inadequacy of the proposed explanations, given the increasing diversity and complexity of international migration. Furthermore, the theories at the macro-level have been criticized for "economic reductionism", that is, explaining the international migration by economic mechanisms and the exclusive focus on macro-structural factors as well as by the neglected impacts of micro-structural factors including individuals, and their local environment, whereas the theories at the micro-level have been criticized for their insufficient attention to the macro-structural factors of migration (for a comprehensive evaluation, see Massey et al., 1998; Morawska, 2007; and Haas 2010). The specific criticisms of each particular model are summarized in Table 1.

Table 1: The main concerns and criticisms of international migration theories

International Migration Theories	Concerns and Criticisms
Push and Pull Model:	<ul style="list-style-type: none"> <li>• For treating wage differentials on their own and taken out of the broader context of the economic dynamics of the involved regions.</li> <li>• For the empirically disproven assumption that international migration leads to a balancing of the forces of economic growth in different regions.</li> </ul>
Segmented Labour Market Theory:	<ul style="list-style-type: none"> <li>• For the unjustified focus only on the demand (pull) side of the mechanisms of migration flows by demonstrating the importance of the supply (push) circumstances in co-determining this movement.</li> <li>• For the invalid assumption that it is formal recruitment by receiver-country companies that leads most migrants to undertake their international migration by demonstrating empirically the operation of other channels of migration.</li> </ul>
World-System Theory:	<ul style="list-style-type: none"> <li>• For focusing too much on the global, and for being detached from the reality on the ground, as well as having a too simplified explanatory approach to the international movement of people.</li> </ul>
Political Economy Model:	<ul style="list-style-type: none"> <li>• For its single-factor explanation that does not account for the complexity of the examined phenomenon.</li> <li>• For the excessive causal weight accorded to the macro-level political forces in shaping international migration flows at the cost of human actors and their local environment.</li> <li>• For its one-sided interpretation of receiver-state immigration policies, as motivated exclusively by economic self-interest.</li> </ul>
Neoclassical Economic Theory:	<ul style="list-style-type: none"> <li>• For its inaccurate view of people as being moved solely by rational calculation and profit maximization, and the tendency to disregard other migration motives, as well as the fact that migrants belong to households, families, and communities.</li> <li>• For its mistaken assumption that all potential migrants have equal and unlimited access to relevant information on the basis of which to make well-grounded decisions about the move (or non-move).</li> </ul>
Human Capital Theory:	<ul style="list-style-type: none"> <li>• For the lack of acknowledgment of the culturally-specific and variable nature of human capital values, and, therefore, using a basic unit of analysis that is hardly comparable across time and space.</li> <li>• Human capital is somehow related to likelihood of international migration, but the intensity and direction of this relationship remain unspecified.</li> </ul>
New Economics of Migration Theory:	<ul style="list-style-type: none"> <li>• For neglecting to isolate the influence of sender-locality market imperfections from other potentially contributing factors, such as expected employment and income in the destination.</li> <li>• For its assumption of households as monolithic, altruistic units taking unanimous decisions for the advantage of the whole group.</li> </ul>

---

	<ul style="list-style-type: none"> <li>• For the possibility of masking intra-household age, gender, and other inequalities, and of disguising the importance of migration-relevant social bonds with non-household family, community members and friends.</li> </ul>
Migration Network or Social Capital Theory:	<ul style="list-style-type: none"> <li>• For its fragmentary account of the international migration process, focusing only on its sustaining phase.</li> <li>• For the difficulties of demonstrating empirically that migration networks of information and assistance are indeed the most powerful (as presumed in the model) predictors of the transnational movement of people.</li> </ul>
Cumulative Causation Theory:	<ul style="list-style-type: none"> <li>• For its exclusive focus on the conditions in agricultural societies (land distribution, organization of agricultural production).</li> <li>• For the lack of a theoretical elaboration of the impact of outmigration on the economies of urban regions that are presently sending large numbers of migrants.</li> <li>• For the necessity to gather, difficult to obtain, systematic longitudinal data in order to empirically verify the theory's claims.</li> </ul>

---

The complexity and multiplicity of mechanisms that initiate and sustain international migration has led migration researchers to only to critically evaluate the existing theories but also to attempt to formulate new and more complex explanatory approaches. Massey et al. (1998) have evaluated each theoretical explanation against empirical research drawn from the world's major international migration systems, and they have discerned the degree of support for propositions linked to each theory, and developed a synthetic explanation for the emergence and persistence of international migration. On the basis of an empirical assessment of the validity of different theoretical models of international migration, Massey and colleagues in their seminal book *Worlds in Motion: Understanding International Migration at the End of the Millenium* (1998) came to the conclusion that these theories are neither inconsistent nor mutually exclusive, and in fact, all of them “*play some role in accounting for international migration in the contemporary world although different models predominate at different phases of the migration process*” (Massey et al., 1998: 281). They have stated that a combination of world-system theory, segmented labour market theory, neoclassical economic theory and the new economics of migration can explain best the initiation of international migratory flows. While a combination of world system theory and segmented labour market theory can explain international migratory flows at the macro level, neoclassical economics and the new economics of migration theories can explain the mechanisms at the micro-level. In a more recent evaluation, Massey (2003) has stated that the effects of market expansion, market failure, social networks, and cumulative causation determine the initial phases of the flows, but, as the level of out-migration reaches high levels and the costs and risks of international movement fall, the migratory flows are increasingly determined by international wage differentials (neoclassical economics) and labour demand (segmented labour market theory).

Although this valuable “multiplex” approach developed by Massey et al. (1998) includes macro- and micro-level structural factors and individual actions, according to Morawska (2007) it does not attempt to integrate these factors that shape international migration into a theoretically coherent account of this process. In order to accomplish this task, Morawska suggests the



*structuration model* of international migration that incorporates the contributions of *Worlds in Motion*'s ground-breaking work by theoretically elaborating the categories of social structure and human agency, as well as accommodating in one theoretical framework the reciprocal influences of migrants' purposeful activities and home and host societal structures. The structuration model (Giddens, 1984) postulates that structures, rules, and norms emerge as outcomes of people's daily practices and actions, both intended and unintended, and that these structural forms subsequently shape people's actions within a possibilistic range. In other words, the structuration model is based on the assumption that society shapes individuals and, simultaneously, the individuals shape society in an ongoing process of mutual (re)constitution. Morawska (2007: 12) summarizes the structuration process as follows: *'Whereas the long-term and immediate configurations and pressures of forces at the upper structural layers set the "dynamic limits" of the possible and impossible within which people act, it is at the level of the more proximate social surroundings that individuals and groups evaluate their situations, define purposes, and undertake actions the intended and, often, unintended consequences of which, in turn, affect these local-level and, over time, larger-scope structures.'* According to Morawska, there are two advantages of the structuration approach over other theories of international migration: (i) it accommodates the multiplicity of generating and sustaining factors of migratory flows; and (ii) it links in one theoretical framework macro- and micro-structural factors that shape international migration.

The increasing diversity and complexity of international migration, and the existence of a fragmented set of theories that remain inadequate to explain the complexity and multiplicity of the phenomenon, as well as the increasing political debate about the costs and benefits of international migration on the basis of a set of assumptions derived partly from the theories explained above all reveal the need for a new migration thinking. In the next part, we evaluate the assumptions of the traditional or 'old' migration thinking from the perspective of the migration-development nexus, and we highlight the critical conditions for 'a new migration thinking' from both the research agenda and the policy perspective.

## **5. Towards a New Migration Thinking**

While international migration has increasingly become more complex, migration theories and studies have remained inadequate, owing to the fragmented structure of the theories and the nation-specific assumptions of migration studies. As migration studies developed in the epoch of nationalism, most migration research has been linked to specific national assumptions that are not able to explain today's multilayered and dynamic migration processes that are taking new forms in the changing global context (IMI, 2006). The current state of global migration dynamics – including: (i) the global context of development and the emergence of global cultural and social connectivity; (ii) the changing characteristics of nation-states and the complex ways they are embedded in regional and global relationships; (iii) transformations in communities of both sending and receiving areas; (iv) the transnational character of migrants' identities that challenges classical notions of migrant integration and the nation state; (v) the factors that encourage but also hamper effective policy making and collaboration across boundaries; and (vi) the perceived impacts of migration that create new pressures on nation states – has led to a growing complexity (IMI, 2006; Papademetriou and Meissner, 2006). This growing complexity

makes the concepts and assumptions in previous migration studies less relevant or sometimes totally irrelevant.

The concepts that are currently in use have increasingly become less relevant to describe the complexity of the phenomenon. For example, the traditional dichotomies of ‘sending’ and ‘receiving’ countries or ‘emigrant’, ‘immigrant’ or ‘transit’ countries are not helpful dichotomies today, as many countries both send and receive migrants, or they are emigrant, immigrant and transit at the same time (IMI, 2006; Papademetriou and Meissner, 2006). Due to demographic and economic transformations, several middle-income sending countries in North Africa and the Middle East (Turkey, Tunisia and Morocco), Central America (Mexico) and Asia (Thailand, Malaysia) are gradually becoming receiving countries (IMI, 2006). Similarly, the concept of ‘permanent’ versus ‘temporary’ migration is becoming less relevant today, as many permanent migrants return to their countries or move on to other countries, and many temporary migrants stay legally or illegally in their countries of employment (Dayton-Johnson et al., 2007; Papademetriou and Meissner, 2006), while many others move in a repeated and circular fashion and adopt transnational behaviour (IMI, 2006; Vertovec, 2007). The dichotomy of ‘highly-skilled’ and ‘low-skilled’ migrants may be less meaningful than policy makers assume: as an individual’s labour is needed, the human capital differential between the two levels of skills may be of little relevance. Furthermore, Papademetriou and Meissner (2006) state that we must be careful to know whether we are referring to the skill requirements of the job or the skill capital of the holder of the job, while giving examples that very often educated migrants have to take low-skilled jobs, working, for example, as engineers driving taxis, teachers doing construction, or doctors working in non-professional jobs in hospitals.

Not only the concepts but also the key assumptions on migration patterns have increasingly become less relevant. Massey (2003: 25) has identified the facts of today that are different and more complicated than the assumptions made in the past:

1. Contrary to common belief, *international migration does not stem from a lack of economic growth and development, but from development itself*. Today, the poorest and least-developed nations do not send the most international migrants. With the exception of a few sources of refugees, international migrants tend to originate in nations whose economies are growing rapidly and fertility rates falling, as a result of their incorporation into global trading networks.
2. *Immigration is a natural consequence of broader processes of social, political, and economic integration across international borders*. Immigrants neither scatter randomly and nor do they necessarily head for the *nearest* wealthy society: rather, they go to places to which they are *already linked* economically, socially, and politically.
3. When they enter developed capitalist nations, *immigrants are generally responding to a strong and persistent demand that is built into the structure of post-industrial economies*. The labor markets in developed nations have become increasingly segmented into a primary sector containing ‘good’ jobs attractive to natives, and a secondary sector of poorly paid ‘bad’ jobs that natives shun. To fill the latter, employers turn to immigrants, often initiating flows through direct recruitment. If there were no demand for their services, immigrants, particularly those without documents, would not come, as they would have no means of supporting themselves.

4. *Migrants who enter a developed country for the first time generally do not intend to settle there permanently.*
5. *International migration is often less influenced by conditions in labour markets than by those in other kinds of markets.*
6. *As international migrants accumulate experience abroad, their motivations change, usually in ways that promote additional trips of longer duration, yielding a rising likelihood of settlement over time.* Although most migrants begin as target earners, they are changed by the migrant experience itself.
7. *International migration tends to build its own support infrastructure over time.* The most important mechanism that sustains international migration is the expansion of migrant networks.
8. Despite strong tendencies toward self-perpetuation and settlement, *immigrant flows do not last forever – they have a natural life that may be longer or shorter but are necessarily of limited duration.* Data indicate that, with economic development, most European nations underwent an “emigration transition” from low to high to low emigration rates. Historically, this process took eight or nine decades, which is admittedly a long time to accept immigrants while waiting for economic conditions to improve in the sending regions; but recent experience suggests that the transition time has shortened considerably.

On the basis of these changing patterns in international migration, Massey has suggested that rather than attempting to discourage immigration, policy makers should recognize immigration as a natural part of global economic integration, and work multilaterally to manage it more effectively.

Besides the changing patterns that Massey (2003) has underlined, there are also some other changing patterns mentioned by other researchers and institutions. For example, while the key assumption is that young men who are moving in the hope of employment are regarded as primary migration streams, the feminization of migration as well as the increasing mobility of people at various stages of the lifecycle, such as migration at retirement, have also been widely observed. Therefore, the social diversity of migration has also increased. On the other hand, owing to the dramatic improvements in transportation and communications, migrants have been increasingly able to sustain and develop their social and economic links across national borders, and they have developed ‘transnational’ identities and networks. While many migrants still follow traditional patterns of permanent settlement or temporary labour mobility, increasing numbers are now adopting transnational behaviour, and can move in a repeated and circular fashion between their country of origin and a single host country, or they can migrate from one host country to another within the economic and socio-cultural networks of diasporas or transnational communities. As mentioned by IMI (2006: 5), “*Today, a person may work in one country, live in a second and be a citizen of a third*”. Therefore, multi-layered permanent linkages can be developed between distant places (IMI, 2006; Vertovec, 1999, 2004, 2007). From a policy perspective, these changing patterns towards transnationalism question models of political belonging based on an undivided affiliation to a single nation state and challenge new approaches to citizenship and human rights beyond national boundaries. Therefore, the dichotomies of ‘origin’ and ‘destination’, or ‘permanent’, ‘temporary’, ‘transit’ and ‘return’ migration have become difficult to sustain in a world where migrants are increasingly characterized by circulation and simultaneous commitment to two or more societies (Dayton-

Johnson et al., 2007; Haas, 2010; IMI, 2006; Papademetriou and Meissner, 2006; Vertovec, 2007).

An overall evaluation of the concepts and assumptions in migration studies shows that the ‘old’ system tries to manage an increasingly dynamic phenomenon of international migration with static concepts, policy instruments from a different era, and rigid labour market management systems (Dayton-Johnson et al., 2007; IMI, 2006; Papademetriou and Meissner, 2006). On the contrary, the ‘new migration thinking’ requires us to better understand the new system of mobility, or, in other words, the ‘age of mobility’ and its dynamics, the crucial role of knowledge and technological innovation in development, and an emerging sense of ‘competition’ for well-qualified individuals in these fields willing to sell their human capital in the international marketplace. Developing and managing the new international mobility system also requires a new set of tools including new concepts to articulate and communicate effectively, new policy and management frameworks to gain most from participating in the new system, a new governmental infrastructure that can deliver its assigned functions competently, new models of cooperation between governments, a new set of relationships between public and nongovernmental sectors, and new levels and pools of resources (Papademetriou and Meissner, 2006). The new migration thinking presents many challenges from research and policy perspectives.

## **6. New Directions in Migration Research, Challenges and Policy Perspectives**

Changing patterns and processes of international migration, combined with the limited theoretical and political understanding of how economic, social, cultural and political factors affect the volume, direction and nature of migration, necessitates a shift from the ‘old migration thinking’ to a ‘new migration thinking’ or, in other words, ‘out-of-the box’ thinking (Table 2). On the basis of a number of gaps in conceptualizing migration, which have hampered research and policy, that have been underlined in the literature, the new directions in migration research require radical changes ranging from the focus to the scale of research, and from theoretical approaches to the analysis of migration patterns.

At the theoretical level, the dynamics of globalization and the rise of transnational relations and activities require the development of new theories and methods that go beyond the national assumptions and organizational models, in order to better understand the complexity of mobility, and to study the emerging transnational relations. The new theories of international migration require the development of global and transnational assumptions, complex and dynamic models, and interdisciplinary approaches.

At the analysis level, the new migration thinking requires migration to be taken into consideration as an integral part of development and the global transformation process, rather than as a problem to be solved or managed. The new migration thinking requires us to focus on: (i) the migration process, rather than the migration decision and integration; (ii) complex, mixed and shifting motivations rather than simple categories and dichotomies of migration (i.e. temporary-permanent); (iii) transitional countries, rather than traditional sending-receiving countries (South towards North); (iv) continuous mutation, rather than ‘snapshot’ (IMI, 2006) approaches; (v) migration systems as overlaps and blurred boundaries, rather than migration

systems as closed-off entities; and (vi) diverse communities and transnational lives, rather than integrated communities and lives.

Table 2: New directions in migration research: From the ‘old migration thinking’ to a ‘new migration thinking’

Old Migration Thinking	New Migration Thinking
<b>Focus:</b>	<b>Focus:</b>
‘Migration as a problem’ discourse	→ ‘Migration as an integral part of development’ discourse
International migration	→ Global context of migration
Immigration system	→ A new mobility system (emerging system of international labour mobility)
Open or closed borders	→ ‘Smart’ borders
<b>Scale:</b>	<b>Scale:</b>
Nation-states	→ Regional and global relationships
Nationalism	→ Transnationalism
Basic needs and reasons	→ Complex and diverse reasons
Origin-destination movements	→ Multiple and inter-related movements
<b>Transitions:</b>	<b>Transitions:</b>
Emigrant-immigrant distinction	→ Emigrant, transit, or immigrant at the same time
Demographic and economic problems	→ Demographic and economic transformation
<b>Theory:</b>	<b>Theory:</b>
Nationalism	→ Transnationalism - Migration transition theory
National assumptions and organizational models	→ Global and transnational assumptions and complex and dynamic models
Disciplinary theoretical and methodological approaches	→ Interdisciplinary approaches
<b>Analysis:</b>	<b>Analysis:</b>
Migration is a problem to be ‘managed’ or ‘solved’	→ Migration as an integral part of development and the transformation process
Focus on migration decisions and integration	→ Focus on the process of migration
Focus on ‘beginning’ and ‘ending’	→ Focus on ‘process’
Simple categories and dichotomies (temporary-permanent, economic-asylum-family-student etc.)	→ Complex, mixed and shifting motivations
Traditional ‘sending-receiving’ countries	→ Transitional countries which are experiencing emigration, immigration, and transit migration
South-North	→ South-South
‘Snapshot’ approaches	→ Continuous mutation
Migration systems as closed-off entities	→ Migration systems as overlaps and blurred boundaries
‘Integrated’ communities and lives	→ Diverse communities and transnational lives

The new migration thinking also requires a shift in the scale: from national to transnational, from nation-states to regional and global relationships; from basic needs and reasons to complex and diverse reasons; and from origin-destination movements to multiple and interrelated movements. This shift in the scale requires a better understanding of the transition from the emigrant-

immigrant distinction to emigrant-immigrant-transit at the same time, and from demographic and economic problems to demographic and economic transformation.

At the policy level, the new migration thinking requires us to develop a new discourse that considers migration as an integral part of development, rather than as a problem to be solved. The new migration thinking also requires a better understanding of the global context of migration and the emerging new mobility system and the development of 'smart borders' rather than open or closed border policies in order to better manage the new mobility system.

An overall challenge for both academics and policy makers is to develop more comprehensive approaches to analyse the evolution of migration systems across space and time, in order to improve our understanding of the past and present migration dynamics and their interaction with broader global transformation processes. A further challenge for policy makers is to respond to migration rather than try to control migration.

## References

- Adams, R.H. Jr., Page, J. (2003) *International Migration, Remittances and Poverty in Developing Countries*. World Bank Policy Research Working Paper 3179, Washington DC: World Bank.
- Baycan-Levent, T., Masurel, E., Nijkamp, P. (2003) "Diversity in Entrepreneurship: Ethnic and Female Roles in Urban Economic Life", *International Journal of Social Economics*, 30(11-12): 1131-1161.
- Black, R. (2001) *Environmental Refugees: Myth or Reality?* Working Paper 34. Geneva: United Nations High Commission on Refugees.
- Black, R., Kniveton, D., Skeldon, R., Coppard, D., Murata, A., Schmidt-Verkerk, K. (2008) Demographics and Climate Change: Future Trends and Their Policy Implications for Migration. Migration DRC Working Paper T27. Brighton: Migration DRC, University of Sussex, [http://www.migrationdrc.org/publications/working\\_papers/WP-T27.pdf](http://www.migrationdrc.org/publications/working_papers/WP-T27.pdf)
- Borjas, G.J. (1989) "Economic Theory and International Migration", *International Migration Review*, XXIII(3): 457-485.
- Brown, O. (2008) *Migration and Climate Change*. IOM Migration Research Series, Paper No. 31. Geneva: International Organization for Migration.
- Castles, S., Miller, M.J. (2009) *The Age of Migration*. Houndmills, Basingstoke, Hampshire and London: MacMillan Pres Ltd.
- Christian Aid (2007) *Human Tide: The Real Migration Crisis – A Christian Aid Report*. London: Christian Aid.
- Commander, S., Kangasniemi, M., Winters, L.A. (2003) *The Brain Drain: Curse or Boon?* IZA Discussion Paper No. 809, Bonn: Institute for the Study of Labor (IZA).
- Commander, S., Chanda, R., Kangasniemi, M., Winters, L.A. (2004) *Must Skilled Migration Be a Brain Drain: Evidence from the Indian Software Industry*. IZA Discussion Paper No. 1422, Bonn: Institute for the Study of Labor (IZA).
- Dayton-Johnson, J., Katseli, L.T., Maniatis, G., Münz, R., Papademetriou, D. (2007) *Gaining from Migration: Towards a New Mobility System*. Development Centre of the Organization for Economic Co-Operation and Development, Paris: OECD
- Development Research Centre on Migration, Globalisation & Poverty (2008) *Migration and Climate Change: How Will Climate Shifts Affect Migration Trends?* Briefing No. 12. September 2008.
- EC (2005a) *Migration and development: Some concrete orientations*. Commission of the European Communities, Brussels: Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, COM (2005) 390 Final.
- EC (2005b) *Policy Plan on Legal Migration*. Commission of the European Communities, Brussels: Communication from the Commission, COM (2005) 669 Final.
- Giddens, A. (1984) *The Constitution of Society: Outline of the Theory of Structuration*. Cambridge: Polity Press.

- Glick-Schiller, N., Basch, L.G., Szanton-Blanc, C. (1992) *Towards a Transnational Perspective on Migration: Race, Class, Ethnicity, and Nationalism Reconsidered*. New York: The New York Academy of Science.
- Granovetter, M.S. (1985) "Economic Action and Social Structure: The Problem of Embeddedness", *The American Journal of Sociology*, 91(3): 481-510.
- Haas, H. de (2009) *Mobility and Human Development*. New York: UNDP.
- Haas, H. de (2010) "Migration and Development: A Theoretical Perspective", *International Migration Review*, 44(1): 227-264.
- Harrison, A., Britton, T., Swanson, A. (2004) *Working Abroad: The Benefits Flowing from Nationals Working in Other Economies*. Paris: OECD.
- House of Commons (2004) *Migration and Development: How to make migration work for poverty reduction*. House of Commons, International Development Committee, London: The Stationary Office.
- IADB (2004) *Sending Money Home: Remittances to Latin America and the Caribbean*. Inter-American Development Bank (IADB), Washington DC: IADB.
- IMI (2006) *Towards a New Agenda for International Migration Research*. International Migration Institute (IMI), University of Oxford.
- IOM (2005) *World Migration 2005: Costs and Benefits of International Migration*. Geneva: International Organization for Migration (IOM).
- IOM (2010) *World Migration Report 2010: The Future of Migration: Building Capacities for Change*. Geneva: International Organization for Migration (IOM).
- Katseli, L., Lucas, R., Xenogiani, T. (2006) "Policies for Migration and Development: A European Perspective", *Policy Brief*, No. 30, Paris: OECD Development Centre.
- Kapur, D. (2004) *Remittances: The New Development Mantra*. G-24 Discussion Paper Series 29, Geneva: UNCTAD.
- Lovell, J. (2007) "Climate change to make one billion refugees-agency", *Reuters*, 13 May 2007, <http://www.reuters.com/article/latestCrisis/idUSL10710325>
- Lowell, B.L., Findlay, A., Stewart, E. (2004) *Brain Strain: Optimising Highly-Skilled Migration From Developing Countries*. Asylum and Migration Working Paper 3, London: IPPR.
- Massey, D.S. (1990) "Social Structure, Household Strategies, and the Cumulative Causation of Migration", *Population Index*, 56: 3-26.
- Massey, D.S. (2003) "Patterns and Processes of International Migration in the 21<sup>st</sup> Century", Paper prepared for Conference on African Migration in Comparative Perspective, Johannesburg, South Africa, 4-7 June, 2003.
- Massey, D.S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., Taylor, J.E. (1993) "Theories of International Migration: A Review and Appraisal", *Population and Development Review*, 19(3): 431-466.
- Massey, D.S., Arango, J., Kouaouci, A., Pellegrino, A., Taylor, J.E. (1998) *Worlds in Motion: Understanding International Migration at the End of the Millennium*. Oxford: Oxford University Press.
- Massey, D.S., Goldring, L.P., Durand, J. (1994) "Continuities in Transnational Migration: An Analysis of 19 Mexican Communities", *American Journal of Sociology*, 99: 1492-1533.
- Morawska, E. (2007) "International Migration: Its Various Mechanisms and Different Theories That Try to Explain It", Willy Brandt Series of Working Papers in International Migration and Ethnic Relations: 1/07, IMER/MIM, Malmö University.
- Piore, M.J. (1979) *Birds of Passage: Migrant Labor and Industrial Society*. New York: Cambridge University Press.
- Portes, A. (1994) The Informal Economy and Its Paradoxes. In: Smelser, N.J. and Swedberg, R. (eds.), *The Handbook of Economic Society*. Princeton, NJ: Princeton University Press, 426-449.
- Portes, A., Guarnizo, L.E., Landolt, P. (1999) "The Study of Transnationalism: Pitfalls and Promise of an Emergent Research Field", *Ethnic and Racial Studies*, 22(2): 217-237.
- Pries, L. (1999) New Migration and Transnational Spaces. In: Pries, L. (ed.), *Migration and Transnational Social Spaces*. Aldershot: Ashgate, 1-36.
- Ratha, D. (2003) Workers' Remittances: An Important and Stable Source of External Finance. In: World Bank, *Global Development Finance Report 2003*, Washington DC: World Bank.
- Sassen, S. (1988) *The Mobility of Labor and Capital: A Study in International Investment and Labor Flow*. Cambridge: Cambridge University Press.
- Sriskandarajah, D. (2005) *Migration and Development*. Global Commission on International Migration (GCIM).
- Stark, O. (1991) *The Migration of Labor*. Cambridge: Basil Blackwell.
- Stern, N. (2007) *The Economics of Climate Change: The Stern Review*. Cambridge: Cambridge University Press.
- Thieme, S. (2006) *Social Networks and Migration: Far West Nepalese Labor Migrants in Delhi*. Münster: LIT.
- Todaro, M.P. (1976) *Internal Migration in Developing Countries*. Geneva: International Labor Office.

- UNESCO (2009) "UNESCO's Activities in the Field of Migration in 2009-2011", Paper presented at the Eight Coordination Meeting on International Migration, Population Division, Department of Economic and Social Affairs, United Nations Secretariat, 16-17 November 2009, New York.
- Vertovec, S. (1999) "Conceiving and Researching Transnationalism", *Ethnic and Racial Studies*, 22(2): 447-462.
- Vertovec, S. (2004) "Migrant Transnationalism and Modes of Transformation", *International Migration Review*, 38(3): 970-1001.
- Vertovec, S. (2007) "Circular Migration: the way forward in global policy?", International Migration Institute, University of Oxford, Paper 4.
- Wallerstein, I. (1974) *The Modern World System: Capitalist Agriculture and the Origins of the European World Economy in the Sixteenth Century*. New York: Academic Press.
- World Bank (2006) *International Labor Migration: Eastern Europe and the Former Soviet Union*. Washington DC: The World Bank, Europe and Central Asia Region.
- World Bank (2011) *Migration and Development Brief*, 16, Migration and Remittances Unit, May 23, 2011.
- Wyss, B. (2004) "Global Poaching: Jamaica's Brain Drain", *Econ-Atrocity Bulletin*, 30 January.



2009-1	Boriana Rukanova Rolf T. Wignand Yao-Hua Tan	From national to supranational government inter-organizational systems: An extended typology, 33 p.
2009-2	Marc D. Bahlmann Marleen H. Huysman Tom Elfring Peter Groenewegen	Global Pipelines or global buzz? A micro-level approach towards the knowledge-based view of clusters, 33 p.
2009-3	Julie E. Ferguson Marleen H. Huysman	Between ambition and approach: Towards sustainable knowledge management in development organizations, 33 p.
2009-4	Mark G. Leijssen	Why empirical cost functions get scale economies wrong, 11 p.
2009-5	Peter Nijkamp Galit Cohen-Blankshtain	The importance of ICT for cities: e-governance and cyber perceptions, 14 p.
2009-6	Eric de Noronha Vaz Mário Caetano Peter Nijkamp	Trapped between antiquity and urbanism. A multi-criteria assessment model of the greater Cairo metropolitan area, 22 p.
2009-7	Eric de Noronha Vaz Teresa de Noronha Vaz Peter Nijkamp	Spatial analysis for policy evaluation of the rural world: Portuguese agriculture in the last decade, 16 p.
2009-8	Teresa de Noronha Vaz Peter Nijkamp	Multitasking in the rural world: Technological change and sustainability, 20 p.
2009-9	Maria Teresa Borzacchiello Vincenzo Torrieri Peter Nijkamp	An operational information systems architecture for assessing sustainable transportation planning: Principles and design, 17 p.
2009-10	Vincenzo Del Giudice Pierfrancesco De Paola Francesca Torrieri Francesca Pagliari Peter Nijkamp	A decision support system for real estate investment choice, 16 p.
2009-11	Miruna Mazurencu Marinescu Peter Nijkamp	IT companies in rough seas: Predictive factors for bankruptcy risk in Romania, 13 p.
2009-12	Boriana Rukanova Helle Zinner Hendriksen Eveline van Stijn Yao-Hua Tan	Bringing is innovation in a highly-regulated environment: A collective action perspective, 33 p.
2009-13	Patricia van Hemert Peter Nijkamp Jolanda Verbraak	Evaluating social science and humanities knowledge production: an exploratory analysis of dynamics in science systems, 20 p.

2009-14	Roberto Patuelli Aura Reggiani Peter Nijkamp Norbert Schanne	Neural networks for cross-sectional employment forecasts: A comparison of model specifications for Germany, 15 p.
2009-15	André de Waal Karima Kourtit Peter Nijkamp	The relationship between the level of completeness of a strategic performance management system and perceived advantages and disadvantages, 19 p.
2009-16	Vincenzo Punzo Vincenzo Torrieri Maria Teresa Borzacchiello Biagio Ciuffo Peter Nijkamp	Modelling intermodal re-balance and integration: planning a sub-lagoon tube for Venezia, 24 p.
2009-17	Peter Nijkamp Roger Stough Mediha Sahin	Impact of social and human capital on business performance of migrant entrepreneurs – a comparative Dutch-US study, 31 p.
2009-18	Dres Creal	A survey of sequential Monte Carlo methods for economics and finance, 54 p.
2009-19	Karima Kourtit André de Waal	Strategic performance management in practice: Advantages, disadvantages and reasons for use, 15 p.
2009-20	Karima Kourtit André de Waal Peter Nijkamp	Strategic performance management and creative industry, 17 p.
2009-21	Eric de Noronha Vaz Peter Nijkamp	Historico-cultural sustainability and urban dynamics – a geo-information science approach to the Algarve area, 25 p.
2009-22	Roberta Capello Peter Nijkamp	Regional growth and development theories revisited, 19 p.
2009-23	M. Francesca Cracolici Miranda Cuffaro Peter Nijkamp	Tourism sustainability and economic efficiency – a statistical analysis of Italian provinces, 14 p.
2009-24	Caroline A. Rodenburg Peter Nijkamp Henri L.F. de Groot Erik T. Verhoef	Valuation of multifunctional land use by commercial investors: A case study on the Amsterdam Zuidas mega-project, 21 p.
2009-25	Katrin Oltmer Peter Nijkamp Raymond Florax Floor Brouwer	Sustainability and agri-environmental policy in the European Union: A meta-analytic investigation, 26 p.
2009-26	Francesca Torrieri Peter Nijkamp	Scenario analysis in spatial impact assessment: A methodological approach, 20 p.
2009-27	Aliye Ahu Gülümser Tüzin Baycan-Levent Peter Nijkamp	Beauty is in the eyes of the beholder: A logistic regression analysis of sustainability and locality as competitive vehicles for human settlements, 14 p.

2009-28	Marco Percoco Peter Nijkamp	Individual time preferences and social discounting in environmental projects, 24 p.
2009-29	Peter Nijkamp Maria Abreu	Regional development theory, 12 p.
2009-30	Tüzin Baycan-Levent Peter Nijkamp	7 FAQs in urban planning, 22 p.
2009-31	Aliye Ahu Gülümser Tüzin Baycan-Levent Peter Nijkamp	Turkey's rurality: A comparative analysis at the EU level, 22 p.
2009-32	Frank Bruinsma Karima Kourtit Peter Nijkamp	An agent-based decision support model for the development of e-services in the tourist sector, 21 p.
2009-33	Mediha Sahin Peter Nijkamp Marius Rietdijk	Cultural diversity and urban innovativeness: Personal and business characteristics of urban migrant entrepreneurs, 27 p.
2009-34	Peter Nijkamp Mediha Sahin	Performance indicators of urban migrant entrepreneurship in the Netherlands, 28 p.
2009-35	Manfred M. Fischer Peter Nijkamp	Entrepreneurship and regional development, 23 p.
2009-36	Faroek Lazrak Peter Nijkamp Piet Rietveld Jan Rouwendal	Cultural heritage and creative cities: An economic evaluation perspective, 20 p.
2009-37	Enno Masurel Peter Nijkamp	Bridging the gap between institutions of higher education and small and medium-size enterprises, 32 p.
2009-38	Francesca Medda Peter Nijkamp Piet Rietveld	Dynamic effects of external and private transport costs on urban shape: A morphogenetic perspective, 17 p.
2009-39	Roberta Capello Peter Nijkamp	Urban economics at a cross-yard: Recent theoretical and methodological directions and future challenges, 16 p.
2009-40	Enno Masurel Peter Nijkamp	The low participation of urban migrant entrepreneurs: Reasons and perceptions of weak institutional embeddedness, 23 p.
2009-41	Patricia van Hemert Peter Nijkamp	Knowledge investments, business R&D and innovativeness of countries. A qualitative meta-analytic comparison, 25 p.
2009-42	Teresa de Noronha Vaz Peter Nijkamp	Knowledge and innovation: The strings between global and local dimensions of sustainable growth, 16 p.
2009-43	Chiara M. Traversi Peter Nijkamp	Managing environmental risk in agriculture: A systematic perspective on the potential of quantitative policy-oriented risk valuation, 19 p.
2009-44	Sander de Leeuw	Logistics aspects of emergency preparedness in flood disaster prevention, 24 p.

Iris F.A. Vis  
Sebastiaan B. Jonkman

- |         |   |   |
|---------|---|---|
| 2009-45 | Eveline S. van Leeuwen<br>Peter Nijkamp   | Social accounting matrices. The development and application of SAMs at the local level, 26 p.                                 |
| 2009-46 | Tibert Verhagen<br>Willemijn van Dolen  | The influence of online store characteristics on consumer impulsive decision-making: A model and empirical application, 33 p. |
| 2009-47 | Eveline van Leeuwen<br>Peter Nijkamp  | A micro-simulation model for e-services in cultural heritage tourism, 23 p.   |
| 2009-48 | Andrea Caragliu<br>Chiara Del Bo<br>Peter Nijkamp   | Smart cities in Europe, 15 p.   |
| 2009-49 | Farook Lazrak<br>Peter Nijkamp<br>Piet Rietveld<br>Jan Rouwendal                              | Cultural heritage: Hedonic prices for non-market values, 11 p.  |
| 2009-50 | Eric de Noronha Vaz<br>João Pedro Bernardes<br>Peter Nijkamp                                  | Past landscapes for the reconstruction of Roman land use: Eco-history tourism in the Algarve, 23 p.                           |
| 2009-51 | Eveline van Leeuwen<br>Peter Nijkamp<br>Teresa de Noronha Vaz                                 | The Multi-functional use of urban green space, 12 p.  |
| 2009-52 | Peter Bakker<br>Carl Koopmans<br>Peter Nijkamp  | Appraisal of integrated transport policies, 20 p.   |
| 2009-53 | Luca De Angelis<br>Leonard J. Paas  | The dynamics analysis and prediction of stock markets through the latent Markov model, 29 p.                                  |
| 2009-54 | Jan Anne Annema<br>Carl Koopmans  | Een lastige praktijk: Ervaringen met waarderen van omgevingskwaliteit in de kosten-batenanalyse, 17 p.                        |
| 2009-55 | Bas Straathof<br>Gert-Jan Linders   | Europe's internal market at fifty: Over the hill? 39 p.   |
| 2009-56 | Joaquim A.S. Gromicho<br>Jelke J. van Hoorn<br>Francisco Saldanha-da-Gama<br>Gerrit T. Timmer | Exponentially better than brute force: solving the job-shop scheduling problem optimally by dynamic programming, 14 p.        |
| 2009-57 | Carmen Lee<br>Roman Kraeussl<br>Leo Paas  | The effect of anticipated and experienced regret and pride on investors' future selling decisions, 31 p.                      |
| 2009-58 | René Sitters  | Efficient algorithms for average completion time scheduling, 17 p.  |

2009-59	Masood Gheasi Peter Nijkamp Piet Rietveld	Migration and tourist flows, 20 p.
---------	---	------------------------------------

2010-1	Roberto Patuelli Norbert Schanne Daniel A. Griffith Peter Nijkamp	Persistent disparities in regional unemployment: Application of a spatial filtering approach to local labour markets in Germany, 28 p.
2010-2	Thomas de Graaff Ghebre Debrezion Piet Rietveld	Schaalsprong Almere. Het effect van bereikbaarheidsverbeteringen op de huizenprijzen in Almere, 22 p.
2010-3	John Steenbruggen Maria Teresa Borzacchiello Peter Nijkamp Henk Scholten	Real-time data from mobile phone networks for urban incidence and traffic management – a review of application and opportunities, 23 p.
2010-4	Marc D. Bahlmann Tom Elfring Peter Groenewegen Marleen H. Huysman	Does distance matter? An ego-network approach towards the knowledge-based theory of clusters, 31 p.
2010-5	Jelke J. van Hoorn	A note on the worst case complexity for the capacitated vehicle routing problem, 3 p.
2010-6	Mark G. Lijesen	Empirical applications of spatial competition; an interpretative literature review, 16 p.
2010-7	Carmen Lee Roman Kraeussl Leo Paas	Personality and investment: Personality differences affect investors' adaptation to losses, 28 p.
2010-8	Nahom Ghebrihiwet Evgenia Motchenkova	Leniency programs in the presence of judicial errors, 21 p.
2010-9	Meindert J. Flikkema Ard-Pieter de Man Matthijs Wolters	New trademark registration as an indicator of innovation: results of an explorative study of Benelux trademark data, 53 p.
2010-10	Jani Merikivi Tibert Verhagen Frans Feldberg	Having belief(s) in social virtual worlds: A decomposed approach, 37 p.
2010-11	Umut Kilingç	Price-cost markups and productivity dynamics of entrant plants, 34 p.
2010-12	Umut Kilingç	Measuring competition in a frictional economy, 39 p.

2011-1	Yoshifumi Takahashi Peter Nijkamp	Multifunctional agricultural land use in sustainable world, 25 p.
2011-2	Paulo A.L.D. Nunes Peter Nijkamp	Biodiversity: Economic perspectives, 37 p.
2011-3	Eric de Noronha Vaz Doan Nainggolan Peter Nijkamp Marco Painho	A complex spatial systems analysis of tourism and urban sprawl in the Algarve, 23 p.
2011-4	Karima Kourtit Peter Nijkamp	Strangers on the move. Ethnic entrepreneurs as urban change actors, 34 p.
2011-5	Manie Geyer Helen C. Coetzee Danie Du Plessis Ronnie Donaldson Peter Nijkamp	Recent business transformation in intermediate-sized cities in South Africa, 30 p.
2011-6	Aki Kangasharju Christophe Tavera Peter Nijkamp	Regional growth and unemployment. The validity of Okun's law for the Finnish regions, 17 p.
2011-7	Amitrajeet A. Batabyal Peter Nijkamp	A Schumpeterian model of entrepreneurship, innovation, and regional economic growth, 30 p.
2011-8	Aliye Ahu Akgün Tüzin Baycan Levent Peter Nijkamp	The engine of sustainable rural development: Embeddedness of entrepreneurs in rural Turkey, 17 p.
2011-9	Aliye Ahu Akgün Eveline van Leeuwen Peter Nijkamp	A systemic perspective on multi-stakeholder sustainable development strategies, 26 p.
2011-10	Tibert Verhagen Jaap van Nes Frans Feldberg Willemijn van Dolen	Virtual customer service agents: Using social presence and personalization to shape online service encounters, 48 p.
2011-11	Henk J. Scholten Maarten van der Vlist	De inrichting van crisisbeheersing, de relatie tussen besluitvorming en informatievoorziening. Casus: Warroom project Netcentrisch werken bij Rijkswaterstaat, 23 p.
2011-12	Tüzin Baycan Peter Nijkamp	A socio-economic impact analysis of cultural diversity, 22 p.
2011-13	Aliye Ahu Akgün Tüzin Baycan Peter Nijkamp	Repositioning rural areas as promising future hot spots, 22 p.
2011-14	Selmar Meents Tibert Verhagen Paul Vlaar	How sellers can stimulate purchasing in electronic marketplaces: Using information as a risk reduction signal, 29 p.

2011-15	Aliye Ahu Gülümser Tüzin Baycan-Levent Peter Nijkamp	Measuring regional creative capacity: A literature review for rural-specific approaches, 22 p.
2011-16	Frank Bruinsma Karima Kourtit Peter Nijkamp	Tourism, culture and e-services: Evaluation of e-services packages, 30 p.
2011-17	Peter Nijkamp Frank Bruinsma Karima Kourtit Eveline van Leeuwen	Supply of and demand for e-services in the cultural sector: Combining top-down and bottom-up perspectives, 16 p.
2011-18	Eveline van Leeuwen Peter Nijkamp Piet Rietveld	Climate change: From global concern to regional challenge, 17 p.
2011-19	Eveline van Leeuwen Peter Nijkamp	Operational advances in tourism research, 25 p.
2011-20	Aliye Ahu Akgün Tüzin Baycan Peter Nijkamp	Creative capacity for sustainable development: A comparative analysis of European and Turkish rural regions, 18 p.
2011-21	Aliye Ahu Gülümser Tüzin Baycan-Levent Peter Nijkamp	Business dynamics as the source of counterurbanisation: An empirical analysis of Turkey, 18 p.
2011-22	Jessie Bakens Peter Nijkamp	Lessons from migration impact analysis, 19 p.
2011-23	Peter Nijkamp Galit Cohen-blankshtain	Opportunities and pitfalls of local e-democracy, 17 p.
2011-24	Maura Soekijad Irene Skovgaard Smith	The 'lean people' in hospital change: Identity work as social differentiation, 30 p.
2011-25	Evgenia Motchenkova Olgerd Rus	Research joint ventures and price collusion: Joint analysis of the impact of R&D subsidies and antitrust fines, 30 p.
2011-26	Karima Kourtit Peter Nijkamp	Strategic choice analysis by expert panels for migration impact assessment, 41 p.
2011-27	Farook Lazrak Peter Nijkamp Piet Rietveld Jan Rouwendal	The market value of listed heritage: An urban economic application of spatial hedonic pricing, 24 p.
2011-28	Peter Nijkamp	Socio-economic impacts of heterogeneity among foreign migrants: Research and policy challenges, 17 p.
2011-29	Masood Gheasi Peter Nijkamp	Migration, tourism and international trade: Evidence from the UK, 8 p.
2011-30	Karima Kourtit	Evaluation of cyber-tools in cultural tourism, 24 p.



	Peter Nijkamp Eveline van Leeuwen Frank Bruinsma	
2011-31	Cathy Macharis Peter Nijkamp	Possible bias in multi-actor multi-criteria transportation evaluation: Issues and solutions, 16 p.
2011-32	John Steenbruggen Maria Teresa Borzacchiello Peter Nijkamp Henk Scholten	The use of GSM data for transport safety management: An exploratory review, 29 p.
2011-33	John Steenbruggen Peter Nijkamp Jan M. Smits Michel Grothe	Traffic incident management: A common operational picture to support situational awareness of sustainable mobility, 36 p.
2011-34	Tüzün Baycan Peter Nijkamp	Students' interest in an entrepreneurial career in a multicultural society, 25 p.
2011-35	Adele Finco Deborah Bentivoglio Peter Nijkamp	Integrated evaluation of biofuel production options in agriculture: An exploration of sustainable policy scenarios, 16 p.
2011-36	Eric de Noronha Vaz Pedro Cabral Mário Caetano Peter Nijkamp Marco Painho	Urban heritage endangerment at the interface of future cities and past heritage: A spatial vulnerability assessment, 25 p.
2011-37	Maria Giaoutzi Anastasia Stratigea Eveline van Leeuwen Peter Nijkamp	Scenario analysis in foresight: AG2020, 23 p.
2011-38	Peter Nijkamp Patricia van Hemert	Knowledge infrastructure and regional growth, 12 p.
2011-39	Patricia van Hemert Enno Masurel Peter Nijkamp	The role of knowledge sources of SME's for innovation perception and regional innovation policy, 27 p.
2011-40	Eric de Noronha Vaz Marco Painho Peter Nijkamp	Impacts of environmental law and regulations on agricultural land-use change and urban pressure: The Algarve case, 18 p.
2011-41	Karima Kourtit Peter Nijkamp Steeff Lowik Frans van Vught Paul Vulto	From islands of innovation to creative hotspots, 26 p.
2011-42	Alina Todiras Peter Nijkamp Saidas Rafijevas	Innovative marketing strategies for national industrial flagships: Brand repositioning for accessing upscale markets, 27 p.

2011-43	Eric de Noronha Vaz Mário Caetano Peter Nijkamp	A multi-level spatial urban pressure analysis of the Giza Pyramid Plateau in Egypt, 18 p.
2011-44	Andrea Caragliu Chiara Del Bo Peter Nijkamp	A map of human capital in European cities, 36 p.
2011-45	Patrizia Lombardi Silvia Giordano Andrea Caragliu Chiara Del Bo Mark Deakin Peter Nijkamp Karima Kourtiti	An advanced triple-helix network model for smart cities performance, 22 p.
2011-46	Jessie Bakens Peter Nijkamp	Migrant heterogeneity and urban development: A conceptual analysis, 17 p.
2011-47	Irene Casas Maria Teresa Borzacchiello Biagio Ciuffo Peter Nijkamp	Short and long term effects of sustainable mobility policy: An exploratory case study, 20 p.
2011-48	Christian Bogmans	Can globalization outweigh free-riding? 27 p.
2011-49	Karim Abbas Bernd Heidergott Djamil Aïssani	A Taylor series expansion approach to the functional approximation of finite queues, 26 p.
2011-50	Eric Koomen	Indicators of rural vitality. A GIS-based analysis of socio-economic development of the rural Netherlands, 17 p.

2012-1	Aliye Ahu Gülümser Tüzin Baycan Levent Peter Nijkamp Jacques Poot	The role of local and newcomer entrepreneurs in rural development: A comparative meta-analytic study, 39 p.
2012-2	Joao Romao Bart Neuts Peter Nijkamp Eveline van Leeuwen	Urban tourist complexes as Multi-product companies: Market segmentation and product differentiation in Amsterdam, 18 p.
2012-3	Vincent A.C. van den Berg	Step tolling with price sensitive demand: Why more steps in the toll makes the consumer better off, 20 p.
2012-4	Vasco Diogo Eric Koomen Floor van der Hilst	Second generation biofuel production in the Netherlands. A spatially-explicit exploration of the economic viability of a perennial biofuel crop, 12 p.
2012-5	Thijs Dekker Paul Koster Roy Brouwer	Changing with the tide: Semi-parametric estimation of preference dynamics, 50 p.
2012-6	Daniel Arribas Karima Kourtit Peter Nijkamp	Benchmarking of world cities through self-organizing maps, 22 p.
2012-7	Karima Kourtit Peter Nijkamp Frans van Vught Paul Vulto	Supernova stars in knowledge-based regions, 24 p.
2012-8	Mediha Sahin Tüzin Baycan Peter Nijkamp	The economic importance of migrant entrepreneurship: An application of data envelopment analysis in the Netherlands, 16 p.
2012-9	Peter Nijkamp Jacques Poot	Migration impact assessment: A state of the art, 48 p.
2012-10	Tibert Verhagen Anniek Nauta Frans Feldberg	Negative online word-of-mouth: Behavioral indicator or emotional release? 29 p.

2013-1

Tüzin Baycan  
Peter Nijkamp

The migration development nexus: New perspectives and challenges, 22 p.